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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/678,547

10/03/2003

James Thomas Carey

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ExxonMobil Research and Engineering Company
P.O. Box 900
Annandale, NJ 08801-0900

EXAMINER

MCAVOY, ELLEN M

ART UNIT

PAPER NUMBER

1797

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/678,547	Applicant(s) CAREY ET AL.
	Examiner Ellen M. McAvoy	Art Unit 1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 and 17 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Baillargeon et al (7,067,049).

The applied reference has one common inventor with the instant application. The applied reference is assigned to ExxonMobil Oil Corporation which differs from the assignee of this application of ExxonMobil Research and Engineering Company. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

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As previously set forth, Baillargeon et al [“Baillargeon”] disclose formulated lubricating oils derived from highly paraffinic basestocks, specifically wax isomerate basestocks, which have unusually good low-temperature and high-temperature properties which allow unusually broad formulation flexibility compared to traditional hydroprocessed base oils. See column 4, lines 11-30. The formulated lubricant oils of Baillargeon comprise a wax isomerate paraffinic hydrocarbon basestock component in which the extent of branching (BI) and the proximity of branching ($\text{CH}_2 > 4$) are such that:

$$\text{BI} - 0.5(\text{CH}_2 > 4) > 15; \text{ and } \text{BI} + 0.85(\text{CH}_2 > 4) < 45$$

as measured over the hydrocarbon basestock as a whole. Baillargeon teaches that the hydrocarbon composition is produced by the isomerization of Fischer-Tropsch waxes and/or other waxy hydrocarbon materials such as conventional waxy lube raffinates, slack waxes, deoiled slack waxes, foots oil and lube distillate hydrocrackates. The primary basestocks of the prior art to Baillargeon are characterized by the unique combination of both a high viscosity index and an extremely low pour point. Specifically, the highly paraffinic basestock has pour points from about -25°C to about -55°C , a viscosity index from about 130 to about 160, and kinematic viscosities ranging from about 2 cSt to about 13 cSt at 100°C . See column 8, lines 25-38. The examiner is of the position that the highly paraffinic basestock of Baillargeon appears to meet the limitations of the base stock or base oil of the claims since the properties of (i) viscosity index of about 140 or greater, and (ii) pour point of about -20°C or lower may be the same. Although the claimed limitation in independent claims 1, 2, 13 and 14 that the base stock or base oil have (c) “a ratio of measured-to-theoretical low-temperature viscosity equal to about 1.2 or less, at a temperature of about -30°C or lower, where the measured viscosity is cold-crank

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simulator viscosity and where theoretical viscosity is calculated at the same temperature using the Walther-MacCoull equation” is not disclosed in Baillargeon; and the claimed limitation in independent claims 2 and 14 that the base stock have (d) a percent Noack volatility no greater than that calculated by the formula set forth is not disclosed in Baillargeon, the examiner is of the position that the properties may be the same in the base oils disclosed in the prior art since the properties of VI and pour point may be the same, and since the claimed base stock or base oil may be prepared by the same hydrodewaxing process. Baillargeon teaches that the highly paraffinic basestocks may contain one or more additives such as detergents and antioxidants, and may optionally contain other basestocks such as mineral oils, polyalphaolefins, esters, polyalkylenes, alkylated aromatics, hydrocrackates and solvent-refined basestocks. See col. 5, lines 35-64 and column 8. The examiner is of the position that Baillargeon meets the limitations of the above rejected claims.

In response applicants amended independent claims 1, 2, 3, 4, 5 and 14 to include amounts of the antioxidant, foam inhibitor, anti-corrosion additive, and to include that the functional fluids additionally contain at least one demulsifier in a specific amount. Applicants argued that the prior art does not disclose using the claimed base stock with the specific claimed additives obtaining a favorable functional fluid. Applicants argued that the benefits of the claimed combination are disclosed in the examples and Tables 3 through 5. This is not deemed to be persuasive because Baillargeon teaches in column 13 that the formulated lubricating oils include one or more performance additives to impart or enhance the desired performance properties of the finished oil. Baillargeon discloses types of additives including oxidation inhibitors, corrosion inhibitors, defoamants, etc. Although demulsifiers is not set forth,

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Baillargeon discloses that the above description illustrates, but do not limit the types and numbers of lubricant performance components which may be used in the formulated lubricants. Thus the examiner is of the position that Baillargeon meets the limitations of the above rejected claims.

Claim Rejections - 35 USC § 103

Claims 1-15 and 17 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al (6,620,312).

Applicants' arguments filed 08 April 2009 have been fully considered but they are not persuasive. As previously set forth, Murphy et al ["Murphy"] disclose a method for producing lube basestocks from waxy feeds including slack wax, Fischer-Tropsch wax, waxy raffinates and waxy distillates to produce a high quality lube oil product having a unique structural character, a low pour point, a low viscosity, and a high viscosity index (VI). The method comprises the steps of (a) hydrotreating the feed to reduce the sulfur and nitrogen contents, (b) hydroisomerizing a portion of the feed to reduce the wax content, (c) separation of the feed, and (d) hydrocatalytic dewaxing at least a portion of the feed from step (c). See column 1, line 37 to column 2, line 18. Properties of a typical product are set forth in Table 7 wherein VI values range from 137-139 and pour point values range from -25°C to -27°C . The examiner is of the position that the premium synthetic lubricants of Murphy appear to meet the limitations of the base stock or base oil of the claims and of the process for preparing the base stock and base oil of the claims since the viscosity index (VI) of greater than 140 of the claims is not seen to be patentably distinct from the VI values of 137-139 of the prior art. Applicants' invention differs in independent claims 1,

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2, 13 and 14 by including property (c) “a ratio of measured-to-theoretical low-temperature viscosity less than 1.2 at a temperature of about -30°C or lower, where the measured viscosity is cold-crank simulator viscosity and where theoretical viscosity is calculated at the same temperature using the Walther-MacCoull equation”. Although the premium synthetic lubricants of Murphy are not characterized by such values, the examiner is of the position that the claimed function fluids may be the same as those disclosed in Murphy since the properties of VI and pour point may be the same, and since the claimed base stock or base oil may be prepared by the same process. Although the claimed limitation in independent claims 2 and 14 that the base stock have (d) a percent Noack volatility no greater than that calculated by the formula set forth is not disclosed in Murphy, the examiner is of the position that the properties may be the same in the base oils disclosed in the prior art since the properties of VI and pour point may be the same, and since the claimed base stock or base oil may be prepared by the same process.

In response applicants amended independent claims 1, 2, 3, 4, 5 and 14 to include amounts of the antioxidant, foam inhibitor, anti-corrosion additive, and to include that the functional fluids additionally contain at least one demulsifier in a specific amount. Applicants argued that the prior art does not disclose using the claimed base stock with the specific claimed additives obtaining a favorable functional fluid. Applicants argued that the benefits of the claimed combination are disclosed in the examples and Tables 3 through 5. This is not deemed to be persuasive because the addition of conventional performance enhancing lubricant oil additives to a lubricating oil composition to impart a desired property or properties would be obvious to one of ordinary skill in the art.

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The provisional rejection of claims 1-15 and 17 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-44 of copending Application No. 10/678,457 made in the previous office action is withdrawn in view of applicants' submission of a terminal disclaimer which has been approved.

The rejection of claims 1, 2, 4-15 and 17 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention made in the previous office action is withdrawn in view of applicants' amendments to the claims.

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/
Primary Examiner
Art Unit 1797

EMcAvoy
June 29, 2009